

REMARKS

As of the 16 October 2007 *Office Action*, Claims 1-53 are pending in the Application. In the *Office Action*, all pending claims are rejected. Applicant thanks the Examiner with appreciation for the careful consideration and examination given to the Application. By this *Response*, Applicant amends certain claims to clarify some currently claimed embodiments of the invention. No new matter is believed introduced in this submission as at least ¶¶ 0024, 0040, 0047, and 100 of Applicant's *Specification* support the clarifying amendments.

Applicant submits this response solely to facilitate prosecution. As such, Applicant reserves the right to present new or additional claims in this Application that have similar or broader scope as originally filed. Applicant also reserves the right to present additional claims in a later-filed continuation application that have similar or broader scope as originally filed. Accordingly, any amendment, argument, or claim cancellation presented during prosecution is not to be construed as abandonment or disclaimer of subject matter.

After entry of this *Response*, Claims 1-53 are pending. Applicant respectfully asserts that the pending claims are in condition for allowance, and respectfully requests reconsideration of the claims in light of this submission. Applicant, believes that the Application is allowable for the following reasons.

I. Rejections Under 35 U.S.C. § 112 First Paragraph

Claims 36-42 and 50-52 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. On page 3, the *Office Action* states that "[I]n dependent claims 36,50 cited, 'converting the broadcasted information message into a standardized RS 232 or RS 485 signal for communication over a hardwire connection' there are no support for the above limitations throughout applicant's disclosure."

Applicant respectfully asserts that support for the above identified limitations can be found at least in ¶0040 of the *Specification*. As stated therein, "the transceiver unit 106 converts received pollution information messages into a suitable communication signal formatted for communication over a hardwire connection 108. In one embodiment, the transceiver unit 106 formats the received broadcasted RF pollution information messages into a ***standardized RS 232 signal***. Another embodiment converts the received pollution information messages into a ***standardized RS 485 signal***." Consequently, Applicant submits that Claims 36-42 and 50-52

fully comply with the written description requirement, and request withdrawal of the rejections under §112.

II. Rejections Under 35 U.S.C. § 103(a)

In the *Office Action*, Claims 1-53 are rejected under 35 U.S.C. § 103(a).

Claims 1-11 and 13-53 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,356,206 to Salvo et al. (“Salvo”), in view of U.S. Patent No. 6,421,354 to Godlewski (“Godlewski”), in view of U.S. Patent No. 5,481,532 to Hassan (“Hassan”), and in further view of U.S. Patent No. 6,115,580 to Chuprun et al. (“Chuprun”).

Claim 12 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Salvo, Godlewski, Hassan, and Chuprun, in further view of U.S. Patent Application No. 2003/0046377 to Daum et al. (“Daum”).

The USPTO’s *Examination Guidelines For Determining Obviousness* (“*Obviousness Guidelines*”) implement the Supreme Court’s recently reaffirmed “functional approach” to obviousness determinations, which dictates that “[W]hen considering obviousness of a combination of known elements, the operative question is thus ‘whether the improvement is more than the *predictable use* of prior art elements according to their *established functions*.’” (Examination Guidelines For Determining Obviousness, 72 Fed. Reg. 57527 (Oct. 10, 2007), citing *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740 (2007).)

The *Obviousness Guidelines* further state that “[T]he key to supporting any rejection under 35 U.S.C. 103 is the *clear articulation* of the reason(s) *why* the claimed invention would have been obvious.” (*Id.* at 57528).

The *Obviousness Guidelines* clearly reflect the Federal Circuit’s requirement that “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some *articulated reasoning* with some rational underpinning to support the legal conclusion of obviousness.” *In Re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

Claims 1-53, as amended, are patentable because the cited combinations do not teach or suggest *all the claim features*. Further, the features recited in Claims 1-53 are not a predictable use of the elements combined from the cited references according to their established functions.

a. Claims 1-35, 43-49, & 53 Are Patentable Over The Cited References

Claims 1-11, 13-35, 43-49, and 53 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Salvo, in view of Godlewski, Hassan, and Chuprun. Claims 1, 13, 24, 25, 43, and 53, however, each recite features not disclosed in or taught by the cited combinations.

The combination of Salvo, Godlewski, Hassan, and Chuprun fails to disclose each and every feature recited in the claims. For example, Claims 1, 13, 24, 25, 43, and 53 recite a pollution information message that contains information including *each of* “pollution detector type, detected pollution levels, and pollution detector operational status.” On page 4, the *Office Action* concedes that Salvo only teaches transmitting detected pollution levels, and does not teach transmitting information related to pollution detector type and operational status. Hassan and Chuprun are not related to pollution detectors, and thus do not cure Salvo’s defects.

On page 5, the *Office Action* states that in Col. 13, Lns. 35-65 Godlewski teaches transmitting pollution detector type and pollution detector operational status. A review of the cited passage of Godlewski, however, reveals that Godlewski fails to disclose transmitting pollution detector type and operational status. Godlewski states: “whichever sensor format is used, the data transmitted by the sensor to the communicator is reformatted by sensor interface 126 into communicator data format 610.” (Col. 13, Lns. 36-38). Clearly, the Godlewski’s sensor and communicator are two structurally separate elements. Godlewski further states that “communicator data format contains at least five fields: a date and time stamp, a *communicator identification code*, the sensor data, the transmit status, and *the communicator status*...the communicator identification code should uniquely identify the communicator.” (Col. 13, Lns. 39-49).

The *Obviousness Guidelines* clearly require that the Examiner must provide a clear articulation of the reasons why the claimed invention is the predictable use of prior art elements according to they established functions. It is evident that Godlewski teaches transmitting identification and operational status of the *communicator* and *not* of the *pollution detector*. Therefore, a pollution detector transmitting a message containing information regarding the pollution detector type, detected pollution levels, and pollution detector operational status as

claimed is not a predictable use of the elements disclosed in Salvo, Hassan, Chuprun, and Godlewski according to their established functions as taught by the references.

Claim 12 is rejected as allegedly being unpatentable over Salvo, Hassan, Chuprun, and Godlewski in further view of Daum. Claim 12 is directly dependent upon Claim 1. Since Daum does not relate to pollution detectors, it does not cure Salvo, Hassan, Chuprun, and Godlewski's defects with regard to Claim 1. Therefore, Claim 12 is patentable over Salvo, Hassan, Chuprun, Godlewski, and Daum due to its dependence upon Claim 1.

Further, Claim 1 recites additional features not disclosed in Salvo, Hassan, Chuprun, and Godlewski. In particular, Claim 1 recites a “the pollution monitoring management controller comprising logic to redefine a communication path from the first transceiver to the pollution monitoring management controller if a the pollution management controller does not receive a pollution information message from the first transceiver at a scheduled time or in response to a status inquiry.” Contrary to the assertions on page 4 of the *Office Action*, Salvo does not disclose the claimed management controller. Salvo teaches a basic network structure wherein the transceivers 17 coupled to sensors 12 communicate **directly** with transceiver 24 coupled to the control 22. (Fig. 1; Col. 3, Lns. 17-22). Salvo does not disclose alternate paths between transceivers and the controller that would enable redirecting the communication path. Therefore, Salvo does not teach redefining the communication path as recited in Claim 1.

Claim 13 recites a processor “determining a communication path for the pollution information message.” Because there is a single path between transceivers 17 and 24 in Salvo's network, a processor for determining a communication path between the transceivers would serve no purpose, and hence such a processor is not disclosed. Therefore, Salvo fails to teach the recited processor of Claim 13.

Claim 24 recites a controller configured to “determine a communication path for the pollution information message through the transceiver network.” Salvo fails to teach the recited controller of Claim 24 for the similar as discussed above regarding the processor of Claim 13.

Claim 25 recites “defining a communication path to transmit the pollution information message from the transceiver to the second transceiver.” Salvo fails to teach defining a communication path as recited in Claim 25 for similar reasons as discussed above regarding the processor of Claim 13.

Claim 43 recites a pollution management controller comprising logic “to determine a communication path for the pollution information message to communicate the pollution information message between the transceiver and the network transceiver.” Salvo fails to teach defining a logic as recited in Claim 43 for similar reasons as discussed above regarding the processor of Claim 13.

Claim 53 recites a “determining a communication path to transmit the pollution information message within the series of transceivers.” Salvo fails to teach determining a communication path as recited in Claim 53 for similar reasons as discussed above regarding the processor of Claim 13.

For at least these reasons, Salvo, Hassan, Chuprun, and Godlewski, alone or in combination, fail to disclose, teach, or suggest each and every feature of Claims 1, 13, 24, 25, 43, and 53. Thus, Applicants respectfully submit that Claims 1, 13, 24, 25, 43, and 53 are patentable over Salvo, Hassan, Chuprun, and Godlewski, and are in condition for allowance. Further, Claims 2-12, 13-23, 26-35, 44-49 are also believed to be in condition for allowance at least due to their dependence upon Claims 1, 13, 25, and 43, and further features defined therein.

b. Claims 36-42 And 50-52 Are Patentable Over The Cited References

On page 10, the *Office Action* asserts that Claims 36-38 and 41 “are similar to claims 1-11 therefore being rejected for the same rationale as claims 1-11.” On page 11, the *Office Action* states that Claims 50-52 “are similar to claims 36-42 therefore being rejected for the same rational as claims 36-42.” Claims 36 and 50, however, recite limitations that are not taught by the cited references.

The cited references fail to teach each and every feature recited in Claims 36 and 50. In particular, Claims 36 and 50 recite converting a broadcasted pollution information message into a standardized RS232 or RS 485 signal for communication over a hardwired connection. The *Office Action* asserts that in Col. 3, Lns. 36-40 and Col. 13, Lns. 13-35 Godlewski teaches converting a broadcasted pollution information message into an RS-232 signal. A review of the cited passages of Godlewski, however, reveals the distinction between the Claims 36 and 50 and Godlewski.

Godlewski states that “data transmitted from the sensor to a communicator is transmitted in one of several formats...the sensor format used will ordinarily be one of digital 602, analog 604, or RS-232 606.” (Col. 13, Lns. 9-14). It is clear that in Godlewski’s system, an RS-232 signal is only used for interface between a communicator and sensor, **before** the pollution signal is broadcasted. Claims 36 and 50 recite that a broadcasted pollution information message is converted into an RS-232 signal. Because the conversion occurs **after** the message is broadcast, it occurs away from the sensor and communicator at the device receiving the signal.

Clearly, the conversion to RS-232 recited in Claims 36 and 50 occurs **after** the pollution message is broadcasted at a structurally distinct location and in a functional different manner than the RS-232 interface communicating a signal between Godlewski’s sensor and communicator **before** the signal is broadcasted by the communicator. Therefore, converting the broadcasted pollution information message into a standardized signal such as RS 232 for communication over a hardwire connection is not a predictable use of the elements disclosed in Salvo, Hassan, Chuprun, and Godlewski according to their functions as taught by the references. *Ex parte Catan*, (PTO Bd. App. & Int. July 3, 2007, page 10) (“The operative question in this ‘functional approach’ is thus ‘whether the improvement is more than the predictable use of prior art elements according to their established functions.’”).

Claims 36 further recites a “defining a communication path to transmit the pollution information originating from the transceiver within the series of transceivers.” Salvo fails to teach determining a communication path as recited in Claim 53 for similar reasons as discussed above regarding the processor of Claim 13.

Claims 50 further recites a “controller comprising logic to determine a communication path for the pollution information message to communicate the pollution information message within the series of transceivers.” Salvo fails to teach determining a communication path as recited in Claim 50 for similar reasons as discussed above regarding the processor of Claim 13.

Salvo, Hassan, Chuprun, and Godlewski, alone or in combination, fail to disclose, teach or suggest each and every feature of Claims 36 and 50. Thus, Applicants respectfully submit that Claims 36 and 50 are patentable over the cited references, and are in condition for allowance. Further, Claims 37-42 and 51-52 are also believed to be in condition for allowance at least due to their dependence upon Claims 36 and 50 , and further features defined therein.

III. Fees

This *Response* is filed within 3 months of the *Office Action*, and no extension of time fees are believed due. Further, this response does not increase the total number of claims or the number of independent claims, hence no claim fees are believed due. But the Commissioner is expressly authorized to charge any additional fees that may be required, or credit any overpayment, to Deposit Account No. 20-1507.

IV. Conclusion

This *Response* is believed to be a complete response to the 16 October 2007 *Office Action*. Applicants respectfully assert that all pending claims are in condition for allowance and respectfully request issuance of this Application. If Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities remaining in the application correctable by an Examiner's amendment, a telephone call to the undersigned at (404) 885-3487 is respectfully requested.

Respectfully submitted,

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